

### Supplemental file 3.

To:

**Sedentary behaviour Intervention as a personalised Secondary prevention Strategy (SIT LESS) for coronary artery disease patients participating in cardiac rehabilitation: rationale and design of the SIT LESS randomised clinical trial**

B.M.A. van Bakel, MD<sup>1</sup>; S.H. Kroesen, MSc<sup>1</sup>; A. Günal, MD<sup>2</sup>; A. Scheepmaker, MD<sup>2</sup>; W.R.M. Aengevaeren, MD, PhD<sup>3</sup>; F.F. Willems, MD, PhD<sup>3</sup>; R. Wondergem, PhD<sup>4,5,6</sup>; M.F. Pisters, PhD<sup>4,5,6</sup>; J. Dam, MSc<sup>7</sup>; A.M. Janssen, MSc<sup>7</sup>; M. de Bruin, PhD<sup>7</sup>; M.T.E. Hopman, MD, PhD<sup>1</sup>; D.H.J. Thijssen, PhD<sup>1,8</sup>; T.M.H. Eijsvogels, PhD<sup>1</sup>

**Affiliations:**

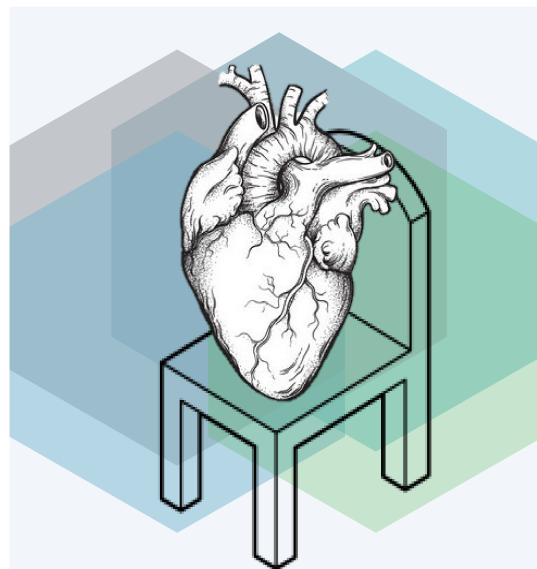
1. Radboud university medical center, Radboud Institute for Health Sciences, Department of Physiology, Nijmegen, The Netherlands
2. Bernhoven hospital, Department of Cardiology, Uden, The Netherlands
3. Rijnstate hospital, Department of Cardiology, Arnhem, The Netherlands
4. Utrecht University, University Medical Center Utrecht Brain Center, Department of Rehabilitation, Physical Therapy Science and Sport, Utrecht, The Netherlands
5. Research Group Empowering Healthy Behaviour, Department of Health Innovations and Technology, Fontys University of Applied Sciences, Eindhoven, The Netherlands
6. Center for Physical Therapy Research and Innovation in Primary Care, Julius Health Care Centers, Utrecht, the Netherlands
7. Radboud university medical center, Radboud Institute for Health Sciences, Department of IQ healthcare, Nijmegen, The Netherlands
8. Research Institute for Sports and Exercise Sciences, Liverpool John Moores University, United Kingdom

**Corresponding author:**

Thijs M.H. Eijsvogels, PhD, Radboud university medical center, Dept. of Physiology, P.O. Box 9101, 6500 HB, Nijmegen, The Netherlands. E-mail: Thijs.Eijsvogels@radboudumc.nl Telephone: (+31) (0)24 36 14273 Fax: (+31) (0)24 3668340

## SIT LESS telephone coaching manual

# SIT LESS – Telephone coaching manual



- Aim telephone coaching:
  - Solve practical issues (e.g. activity tracker (Activ8 sit), synchronize/read out data, daily use, charging, smartphone application, online dashboard)
  - Interim evaluation sedentary behaviour (booster between face-to-face SIT LESS consultations)
    - Discuss preceding 1-2 weeks (longer-term evaluation is performed during face-to-face SIT LESS consultations)
- Frequency:
  - Weekly between first SIT LESS consultation (start CR) and second SIT LESS consultation (interim evaluation at  $\pm 6$  weeks after the start of cardiac rehabilitation)
  - Biweekly between second SIT LESS consultation (interim evaluation) and third (final) SIT LESS consultation (at the end of the cardiac rehabilitation programme)
- Duration telephone coaching:
  - Approximately 10 min per patient
- How:
  - Use the telephone coaching conversation protocol [see below]
  - Use, if needed, the SIT LESS intervention manual [see supplemental file 2]

### Conversation protocol telephone coaching

#### Step 1

##### **Explain the aim and agenda of the telephone coaching at the start:**

As discussed earlier, I call you because of your participation in the SIT LESS study. This telephone consultation will last about 10 minutes. I like to discuss your sedentary behaviour during the last couple of days and to have a look at the results of the activity tracker together. Is that okay?

How did it go last week?

When did you succeed to sit less? What were difficult situations? How did you experience the use of the pocket-worn activity tracker?

[Stimulate success / overcoming difficult situations / discover reasons for less positive experiences / evaluate problems with activity tracker / have a look at the online dashboard together]



#### Interim step

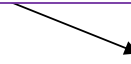
##### **The patient was not able to use the activity tracker/to synchronize data: Discover the obstacle.**

Do you have the device manual? If no: directly send the manual digitally.

- Problems with synchronizing to the mobile phone via Bluetooth: Talk the participants through the whole synchronization process.

- Charging problems: Is the activity tracker connected to the laptop/PC or power network with the supplied adapter? Do you use the micro-USB connector? Did you forget to charge the activity tracker recently?

- Problems when wearing the activity tracker: Search for solutions: in a small sock/pocket with a safety-pin attached to clothing / leg bent / other. When forgotten: connect the use of the activity tracker to a daily routine (brush your teeth, grab your phone, etc.)



#### Step 2a

##### **Patient reaches the goal (most of the time).**

I see in the graph that you succeeded to sit less last week. You reached your goal X of the 7 days.

[Enforce: Well done! I can imagine that this is a great step for you. You may even feel better already]

Mention possible points for improvement and discuss why the goal is not reached at certain days.

When the goal is reached every day: Discuss with the patient to lower the goal with 15-30 min/day. Ask if the patient is able to maintain that behavior. How does it become a routine? [see below]



#### Step 2b

##### **Patient does NOT reach the goal (most of the time).**

I see in the graph that it is difficult for you to sit less last week. Is that correct? Did you experience obstacles when reaching your goal? Try to find possible solutions together with the patient. How did the days that you did not reach your goal differ from days that you reached your goal? [The aim of this question is to come closer to possibilities instead of holding on to impossibilities]. When the patient has clear reasons for not reaching the goal and comes up with a concrete plan for the upcoming weeks: Maintain the goal in consultation with the patient or when the goal is too ambitious: Increase the goal by 15-30 min/day. [see below].

When there is no clear reason: advise the patient to keep a list and write down what works for him/her the upcoming week.



**Step 3a****Enforce behaviour of the patient that leads to (carry on with) sitting less [this strengthens the intern locus of control and motivates]:**

Did you make changes in your daily planning to reach the goal? [thereafter, make the choices explicit]. For example: So you consciously choose to stand up every half hour .... (standing coffee break, walk around during TV commercials) Apparently this works good for you. Keep up the good work!

**Step 3b****Motivational interviewing**

To sum up: When I understand it correctly, it was difficult for you to sit less this week. This was mainly due to ... where ... may help you to still reach your goal. It may also be possible that we choose a too ambitious goal in the first place. It is up to you to try to reach the current goal of maximum X hours of sitting per day or to set the bar lower [lower the goal with 15-30 min per day]. I am curious what your decision will be. When maintaining the goal: [Good to hear that you are trying again to reach the goal. Well done! I am convinced that you will succeed with the plan that we just discussed.]

When adjusting the goal: [Very wise to adjust your goal, the new goal better fits your possibilities and we will reach your ultimate goal also with smaller steps!]

**Closing**

Thank you for your time. Next week, we will call you again to discuss how you are doing, when does it suit you? [plan the next telephone consultation]. It remains important to continue the use of the activity tracker, regularly synchronize the data with the smartphone application (for example every evening) and charge the activity tracker at least weekly.

You can see your results on your smartphone in the meantime if you want (via the app). This way, we can also see how things go, from a distance.

Good luck!